C-Series
Pre-Delivery Instructions

Watkins
The Home Relaxation Specialists

Please take the time to read this booklet carefully, as it will provide you with the information you will need to ensure the safe, secure, and timely installation of your new spa. The following sections are guidelines on how to prepare for delivery and set-up of your new spa. Specifically covered are site selection, delivery access, ground preparation, and electrical requirements.

Remember to carefully read the Owner's Manual that accompanies your spa, and to complete the warranty card within 10 days of delivery. These items, along with other valuable information, will be found in the Owner's Package which has been placed in the equipment compartment of your spa, where you will also find a serial number.

Watkins Manufacturing Corporation reserves the right to change features, specifications and design without notification and without incurring any obligation.

DATE PURCHASED: _____

DATE INSTALLED: _____

DEALER: _____

ADDRESS: _____

TELEPHONE: _____

In most cities and counties, permits will be required for the installation of electrical circuits or the construction of exterior surfaces (decks and gazebos). In addition, some communities have adopted residential barrier codes which may require fencing and/or self-closing gates on the property to prevent unsupervised access to a pool (or spa) by children under 5 years of age. Your spa is equipped with a locking cover that meets the ASTM F1346-91 Standard for Safety Covers and as a result, is usually exempt from most barrier requirements. As a general practice, your local Building Department will inform you of any applicable barrier requirements at the time a permit is obtained for the installation of an electrical circuit. Your dealer can provide information on which permits may be required.

SITE SELECTION AND PREPARATION

IMPORTANT: Site selection and preparation are your responsibility. Carefully read these instructions and consult your authorized dealer if you have any questions.

You probably have a spot picked out for your new spa, whether it's indoors or outdoors, on a patio or on a deck. Just make sure you check the following:

- Always put your spa on a structurally sound, level surface. A filled spa can weigh a great deal. Make certain that the location you choose can support the weight of your filled spa.
- Locate your equipment compartment, which houses all of the electrical components, in a place where water will drain away from it. Allowing water into the equipment compartment can damage the electronics, or may result in tripping your house's circuit breaker.
- Leave yourself easy access to the circuit breakers in the subpanel.
- Never let water get into the subpanel.
- Leave access to the entire front of the spa (the removable panel provides access to the spa's equipment) for periodic spa care and maintenance.

INDOOR/BASEMENT INSTALLATION

Be aware of some special requirements if you place your spa indoors. Water will accumulate around the spa, so flooring materials must provide a good grip when wet. Proper drainage is essential to prevent a build-up of water around the spa. When building a new room for the spa, it is recommended that a floor drain be installed. The humidity will naturally increase with the spa installed. Water may get into woodwork and produce dryrot, mildew, or other problems. Check for airborne moisture's effects on exposed wood, paper, etc. in the room. To minimize these effects, it is best to provide plenty of ventilation to the spa area. An architect can help to determine if more ventilation must be installed.

Your dealer can help you with local information such as zoning regulations and building codes.

DECK INSTALLATION

To be certain your deck can support your spa, you must know the deck's maximum load capacity. **Consult a qualified building contractor or structural engineer before you place the spa on an elevated deck or indoors.** To find the weight of your spa, its contents and occupants, refer to the Spa Specification chart on back page. This weight per square foot must not exceed the structure's rated capacity, or serious structural damage could result.

OUTDOOR AND PATIO INSTALLATION

No matter where you install your new spa, it's important that you have a solid foundation to support it. Structural damage to the spa resulting from incorrect installation or placement on an inadequate foundation is not covered under the spa's limited warranty.

GROUND AND SPA LEVELING PREPARATION

Your spa has been engineered to perform on several types of common yard surfaces. While a concrete slab is best for long-term use*, other foundations are acceptable so long as a level base is prepared prior to delivery. Three foundation base pictures, shown at right, represent examples of alternatives to a concrete slab for spas installed without gazebos or other accessories.

***NOTE:** A reinforced concrete pad at least four inches thick or structurally sound deck able to support the "dead weight" (found in the Spa Specification Chart on back page) is required for your spa. The reinforcing rod or mesh in the pad should be attached to a bond wire.

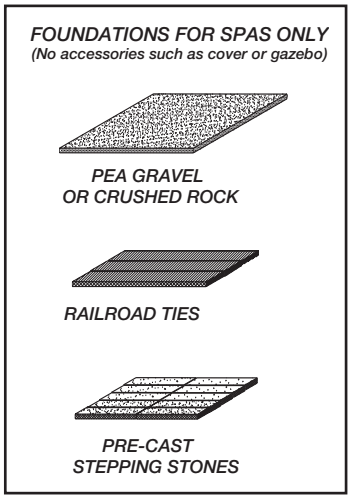
INSTALLATION NOTES:

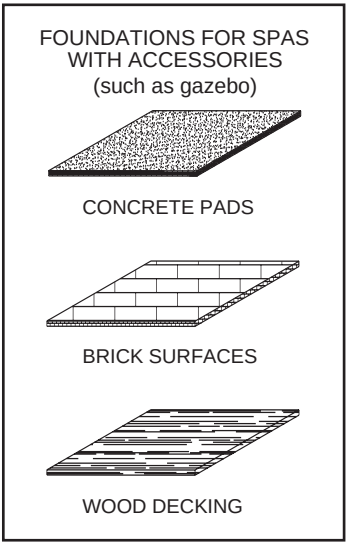
- Concrete sloped at 1/2 inch per 10 feet is preferred so that rain water and water spillover will run off and not puddle underneath the spa (water under the spa for long periods of time may cause the wood to deteriorate).
- If stepping stones or railroad ties are selected for the spa foundation, they should be placed and leveled below the entire spa to maintain even distribution of the spa weight.
- It is important to note that soft surfaces, even when stepping stones are used to distribute the weight of the spa as evenly as possible, will still have a tendency to settle unevenly, resulting in an unlevel spa.
- Remember, placing the spa on grass or dirt may increase the amount of debris which is inadvertently brought into the spa water on the user's feet.

If you are purchasing a deck package or a vinyl gazebo with your spa, a solid foundation becomes mandatory. Placing them on any surface other than a single level pad could create problems with their installation. Pictured at right are a few of the recommended surfaces.

As a homeowner, it is your responsibility to provide a suitable, level foundation for your spa. Keep in mind that most delivery crews are not equipped to level and prepare spa sites.

If you are interested in having a concrete slab, brick surface, or wood deck installed, your dealer should be able to suggest a qualified, licensed contractor.





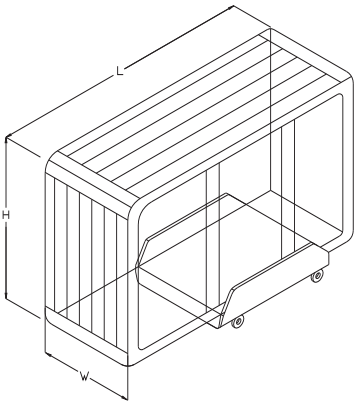
DELIVERY ACCESS

First, locate the dimensions of your spa on the chart below. The dimensions shown are the measurements of the spa in the vertical position, laid on its side.

Next, contact your dealer to find the height and width added by the delivery cart which the dealer will use to deliver your new spa. Use the height of the cart plus the dimension shown as H to determine the vertical clearance required to pass the spa and cart. Use the width of the cart, or dimension W, whichever is greater, to determine the maximum width of clearance necessary.

NOTE: It may be necessary to allow for additional over-head clearance if the spa will be rolled up or down an incline or moved up or down a short flight of stairs.

Use the information below to determine the requirements for access to your desired location. It may be necessary to remove a gate, part of a fence, or other movable obstructions in order to roll the spa to its installation site. About ten percent of the time, a crane is the only way to install the spa by lifting it to its final destination.

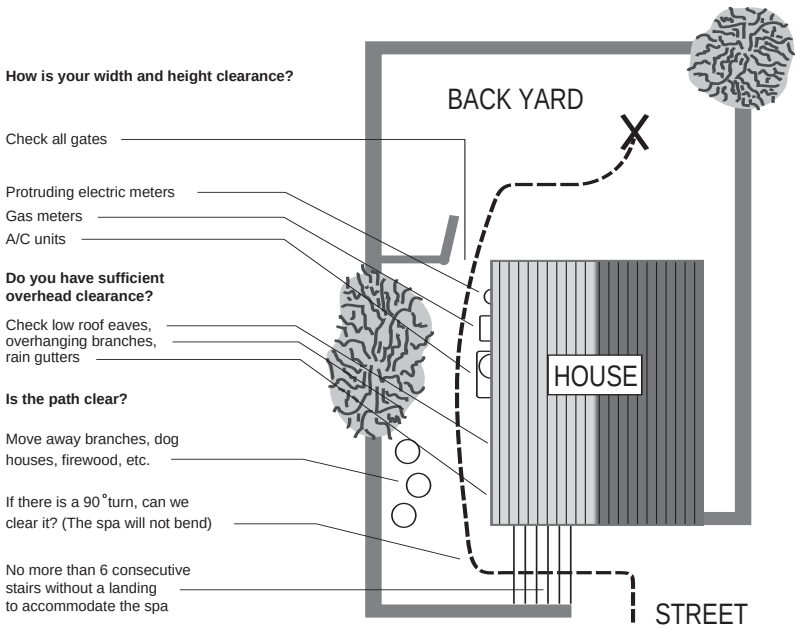


If the spa has to be taken off of the cart to go over a wall (either because the entry area is too narrow, the eaves are too low, the corner is too tight, or the stairway is too steep), a crane will be required. Don't be alarmed!

The crane has a truck-mounted boom which can fit right in your driveway. It is run by a licensed and insured operator. For a charge, the crane operator will lift your spa over walls, buildings, or any other obstruction and place it as close to the installation site as possible. The spa delivery personnel will supervise the crane delivery and complete the spa placement. Crane delivery typically takes an average of 30 minutes to complete.

NOTE: If your spa delivery requires the use of a crane, you may be required to pay for its services at the completion of the delivery.

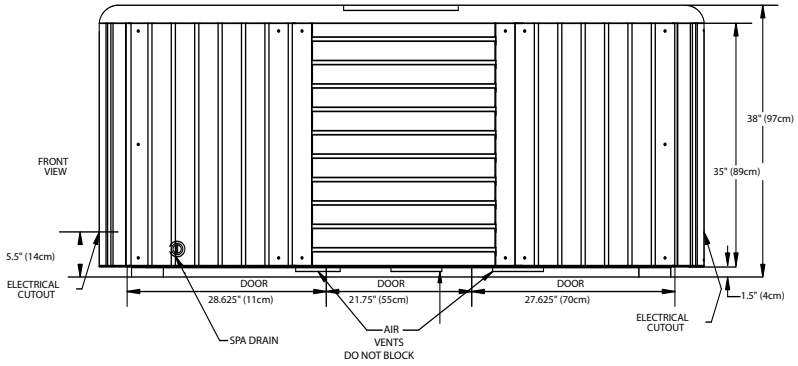
Model	*Height H*	*Length L*	*Width W*
C45S™	89"	89"	38"
C45™	89"	89"	38"
C30S™	89"	89"	38"
C30™	89"	89"	38"

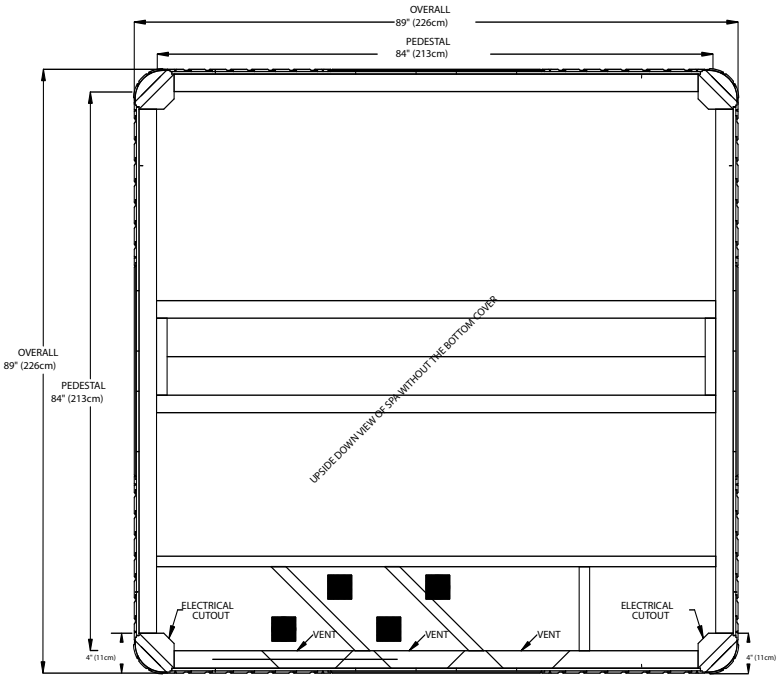

How is your width and height clearance?
Check all gates
Protruding electric meters
Gas meters
A/C units
Do you have sufficient overhead clearance?
Check low roof eaves, overhanging branches, rain gutters
Is the path clear?
Move away branches, dog houses, firewood, etc.
If there is a 90˚turn, can we clear it? (The spa will not bend)
No more than 6 consecutive stairs without a landing to accommodate the spa
BACK YARD
HOUSE
STREET

C-Series Spas

Dimensions

NOTE: All dimensions are approximate; measure your spa before making critical design or pathway decisions.





NOTE: Watkins Manufacturing Corporation requires that the spa be installed on a minimum 4" thick reinforced concrete pad or structurally sound deck able to support the "dead weight" found in the spa specification chart.

WARNING: The spa must not be shimmed in any manner.

ELECTRICAL REQUIREMENTS

SELECTING THE VOLTAGE FOR YOUR SPA

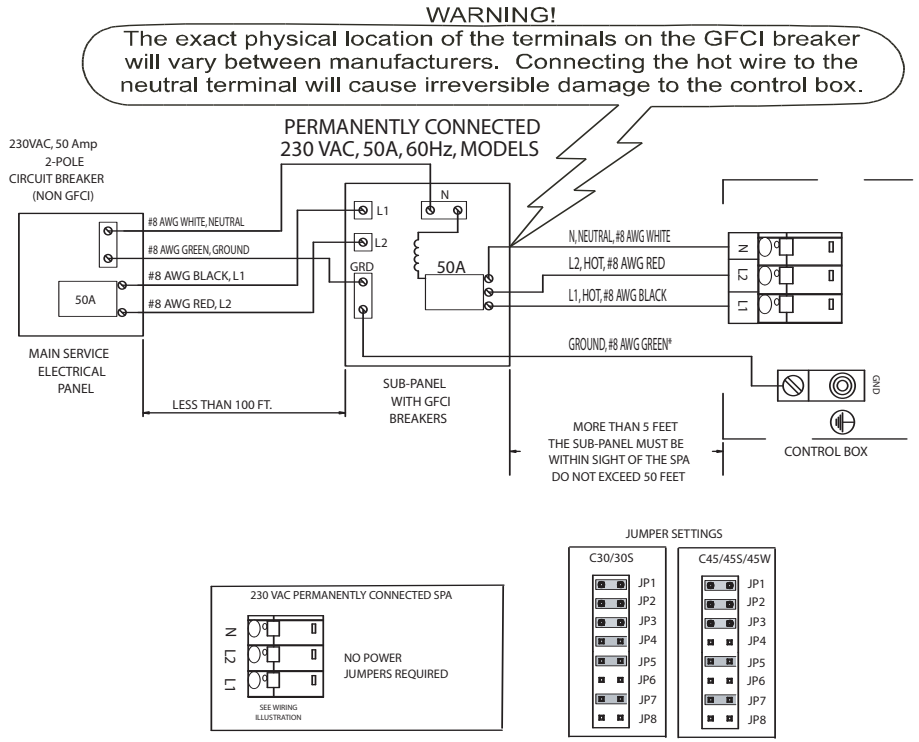
The C-Series models require a 230 volt power supply. When the spas are connected to 230 volts, the heater will provide approximately 4000 watts of heat whether the pump is operating in LOW or HIGH speed and the thermostat is calling for heat.

All electrical connections must be made in accordance with the wiring information contained in the electrical control box or on the back of the field wiring access panel of the equipment module.

STANDARD 230 VOLT ELECTRICAL REQUIREMENTS

To ensure you will have an opportunity to use your spa soon after delivery, it is very important that the required electrical service has been installed. Unless otherwise stipulated by your dealer, **THIS IS YOUR RESPONSIBILITY**.

IMPORTANT: All electrical circuits must be installed by a qualified, licensed electrician. The equipment pack requires a MINIMUM of 112 volts per line under load.



230 VOLT INSTALLATION

Your spa contains a control box designed to operate at 230V, 60Hz. Installation of a 30 or 50 amp dedicated circuit is required. The control box must be hard wired directly to a subpanel protected by a Ground Fault Circuit Interrupter (GFCI). The subpanel containing the GFCI breaker is included with the spa.

IMPORTANT NOTE: All electrical connections to the control box must be accomplished by a qualified electrician in accordance with the National Electrical Code and in accordance with any local electrical codes in effect at the time and place of installation.

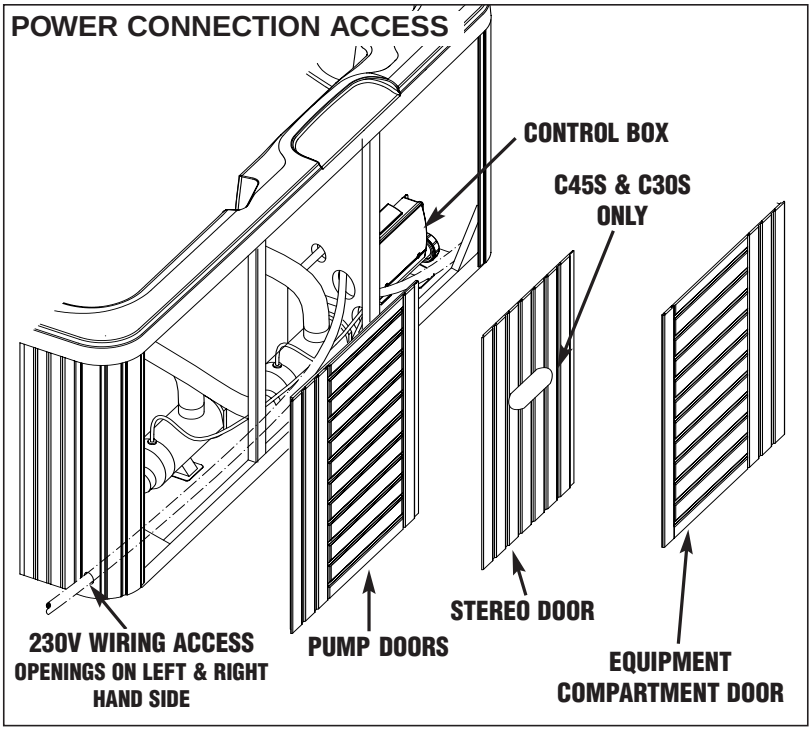
All electrical connections must be made in accordance with the wiring information contained in this manual and on the back of the control box panel. A licensed electrician should install a four-wire electrical service (two line voltages, one neutral, one ground) from the main electrical service panel to the subpanel.

The grounding conductor must be at least #8 AWG. Your electrician should mount the subpanel in the vicinity of the spa but it should not be closer than five (5) feet from the spa water edge (NEC 680-38 to 41-A-3).

INSTALLATION NOTE: After the spa has been installed, your electrician can connect the conduit from the subpanel to the spa's control box and then complete the wiring connections in the control box.

NOTE: Complete step-by-step Installation and Wiring Instructions for all models are included in the Owner's Manual and with each subpanel, which can be obtained from your dealer.

WARNING: Removing or bypassing the GFCI breakers in the subpanel at any time will result in an unsafe spa and will void the warranty.



Services Available From Your Authorized Dealer

Service	Cost
Pre-Delivery site inspection	_____
Deliver spa to installation site	_____
Unwrap spa and haul away packaging material	_____
Set up spa	_____
Fill the spa with water and add Monarch® Silver Cartridge	_____
Water quality and maintenance orientation	_____
Adjust the water's pH, Total Alkalinity and Calcium Hardness	_____
Sanitize the water	_____
Explain and test the spa's operation	
• Jet system	
• Air controls	
• Test lighting	
• Set temperature control	
• Control panel functions	
Explain the safety features	
• GFCI	
• Heater high limit	
General spa operation & maintenance orientation	_____
Inspect the spa cover, place on spa, and install cover locks	_____
Review winterizing instructions	_____
Review Owner's Manual & Warranty Card	_____
Follow-up call	_____
In-store spa water analysis	_____
TOTAL COST	_____

Additional products available from your Authorized Dealer

- Monarch MPS non-chlorine oxidizer
- Monarch MPS test strips
- Retractable cover system with clearance requirements
  - ProLift® - 14" Clearance Required
  - ProLift® II - 24" Clearance Required
- Vinyl covers
- Spa upgrade jet kits
- Replacement Filter Cartridges
- Pillows

NOTES:

NOTES:

SPA SPECIFICATIONS

	Footprint dimensions	Height	Effective filter area	Heater (Watts)	Water capacity	Dry weight	Filled weight*	Dead weight*	Electrical Requirements
C45W Model	7'5" x 7'5"	38"	75 square feet	4,300	475 gallons	920 lbs.	5,915 lbs.	115 lbs. per square foot	230 volt, 50 amp Single phase GFCI circuit
C45S™ Model	7'5" x 7'5"	38"	75 square feet	4,300	475 gallons	920 lbs.	5,915 lbs.	115 lbs. per square foot	230 volt, 50 amp Single phase GFCI circuit
C45™ Model	7 '5 " x 7 '5 "	38"	75 square feet	4,300	475 gallons	920 lbs.	5,915 lbs.	115 lbs. per square foot	230 volt, 50 amp Single phase GFCI circuit
C30S™ Model	7'5" x 7'5"	38"	75 square feet	4,300	475 gallons	920 lbs.	5,915 lbs.	115 lbs. per square foot	230 volt, 50 amp Single phase GFCI circuit
C30™ Model	7'5" x 7'5"	38"	75 square feet	4,300	475 gallons	920 lbs.	5,915 lbs.	115 lbs. per square foot	230 volt, 50 amp Single phase GFCI circuit

CAUTION: Watkins Manufacturing Corporation suggests a structural engineer or contractor be consulted before the spa is placed on an elevated deck.

* **NOTE:** The "Filled weight" and "Dead weight" of the spa includes the weight of the occupants (assuming an average occupant weight of 175 lbs).

Watkins®
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WATKINS MANUFACTURING CORPORATION
1280 Park Center Drive
Vista, California 92081
(800) 669-1881 extension 8432

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